

# Comparative evaluation of functional capacity, quality of life and quality of sleep in elderly submitted to cardiopulmonary and neuro-orthopedic physiotherapy

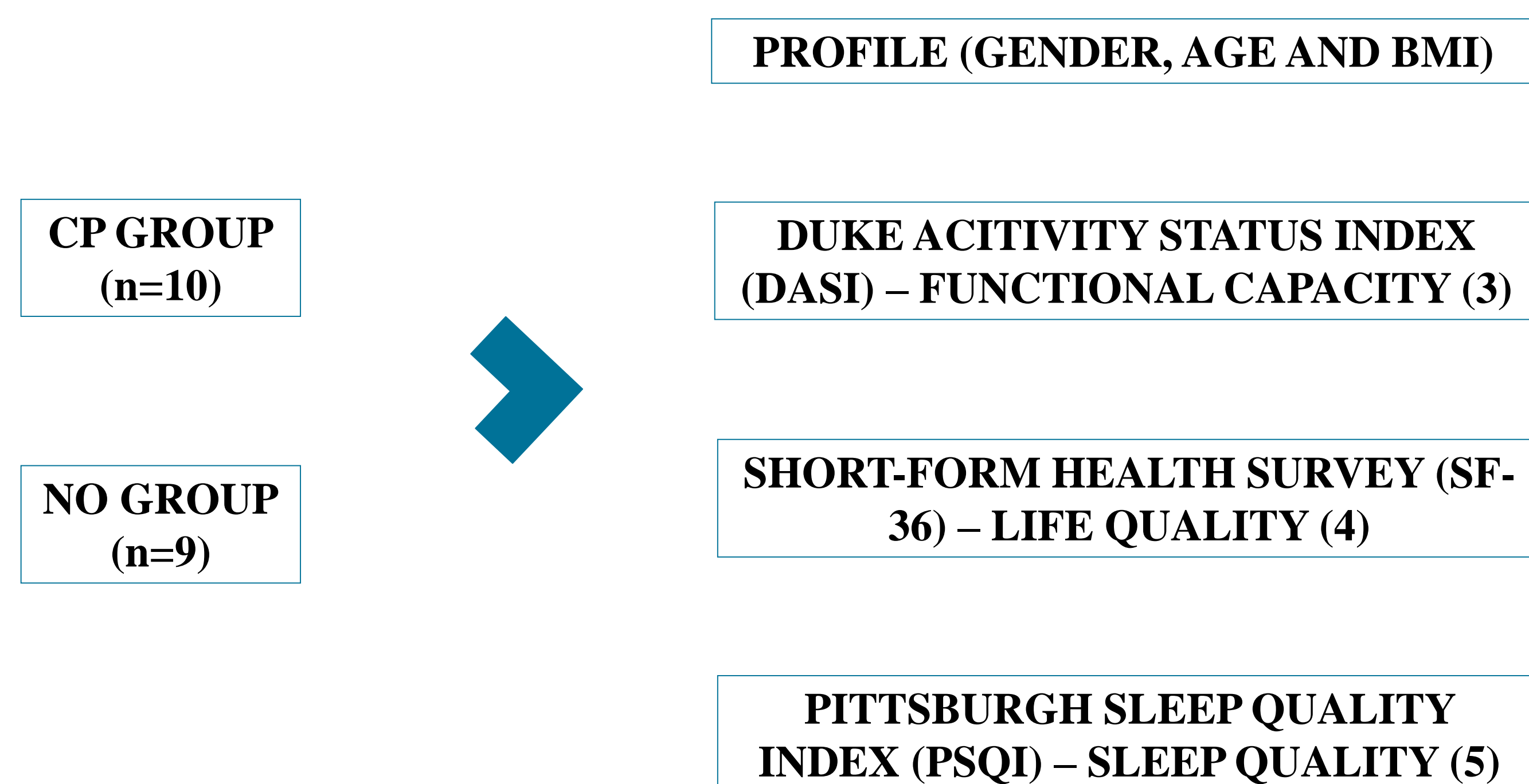
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## INTRODUCTION

With advancing age, the individual progresses with various alterations including cardiovascular disorders, decreased pulmonary function, weakening skeletal muscles and restriction of motor responses, which reduce functional capacity (1). Consequently, there is an increase in physical and social dependence and impairment of life and sleep qualities, although in the absence of diagnosed comorbidities (2). This study aimed to evaluate, through questionnaires, functional capacity, quality of life and quality of sleep in volunteers submitted to cardiopulmonary outpatient physiotherapeutic treatment, and compare the results with those submitted to and neuro-orthopedic physiotherapy.

## MATERIALS AND METHODS



The study design was approved by the University Center of Serra dos Órgãos Ethics Committee (1.295.146/2015) and written informed consent was obtained from each volunteer before participation national resolution. The normality of data distribution (Shapiro-Wilk test) and the homogeneity of variances (Brown-Forsythe test) were firstly tested. A Student t test was used to compare both groups. SigmaStat 3.11 (Systat Software, Inc. San Jose CA, USA) was used. In all instances  $p < 0.05$  was considered as statistically significant.

## ACKNOWLEDGEMENTS

Financial support: PICPq/UNIFESO

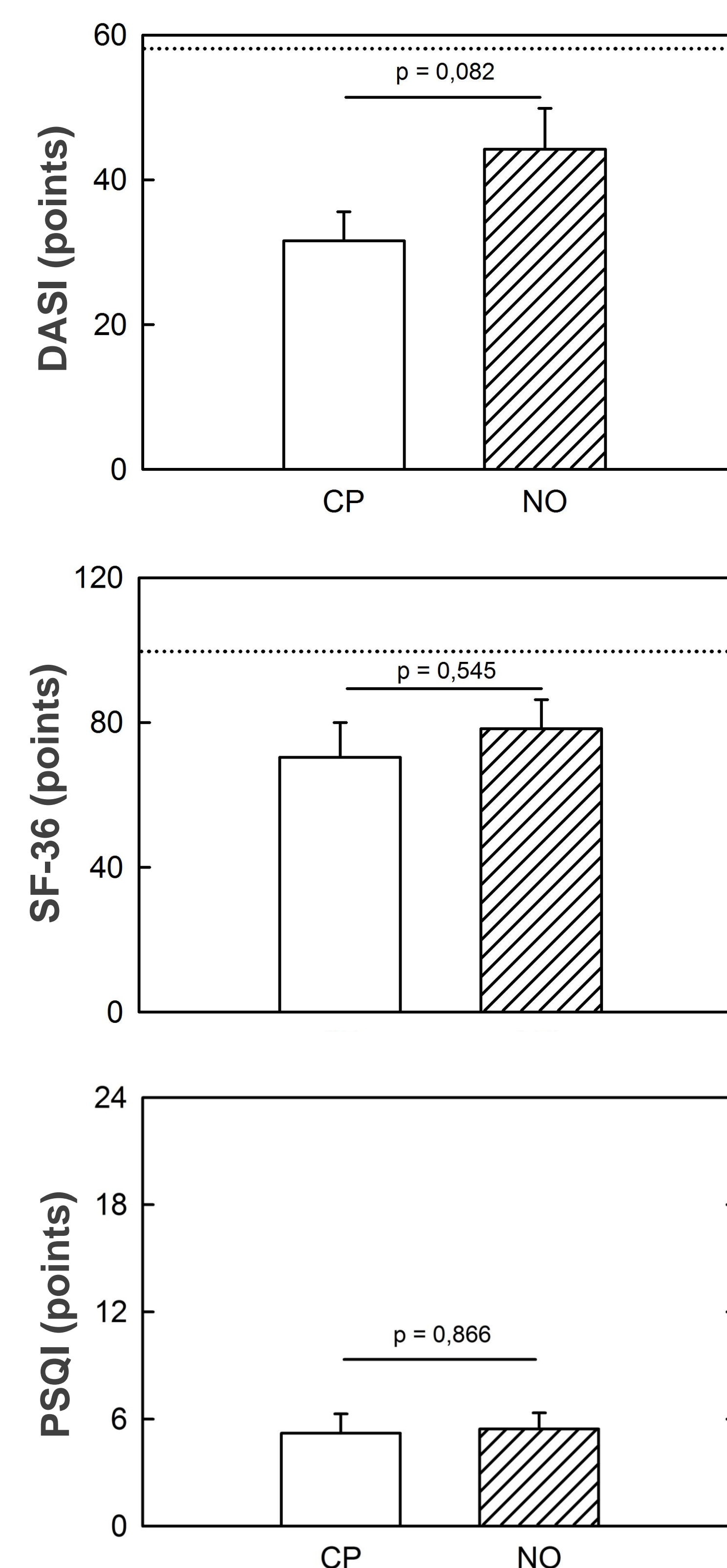
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## RESULTS

Perfile	CP Group	NO Group
Gender prevalence F/M (%)	40.0 / 60.0	77.8 / 22.2
Age (years)	67.7 (5.1)	67.0 (5.3)
BMI (kg/m <sup>2</sup> )	27.6 (3.6)	29.3 (5.5)

Values represent percentage of gender and mean (SD) of age and BMI of volunteers from CP Group (n = 10) and NO Group (n = 9), submitted respectively to cardiopulmonary and neuro-orthopedic physiotherapy. Age and BMI were collected in both groups during evaluation. CP: cardiopulmonary; NO: neuro-orthopedics; F: female; M: male; BMI: body mass index.



Values represent mean  $\pm$  SD of functional capacity measured by DASI questionnaire (upper panel), quality of life measured by SF-36 questionnaire (intermediate panel) and sleep quality assessed by the PSQI questionnaire (lower panel) of CP Group (n = 10) and NO group (n = 9), submitted respectively to cardiopulmonary and neuro-orthopedic physiotherapy. Dotted line: ideal score of the questionnaires. In the PSQI questionnaire, ideal score equals zero. CP: cardiopulmonary; NO: neuro-orthopedics; DASI: Duke Activity Status Index; SF-36: Short-Form Health Survey; PSQI: Pittsburg Sleep Quality Index.

## CONCLUSION

The impairment of functional capacity, quality of life and quality of sleep seems to be present in the elderly, independently of the associated pathology, cardiopulmonary or neuro-orthopedic, demonstrating the need for a broader and directed attention to geriatrics.